

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number

Q93036

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on _____

Signature

Typed or printed name

Application Number
10/567,564

Filed
January 8, 2007

Confirmation Number: 6629

First Named Inventor

Thierry CHOLLEY

Art Unit

1771

Examiner

Randy Boyer

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

- ☒ The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

CORRESPONDENCE ADDRESS

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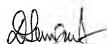
- ☐ applicant/inventor.

assignee of record of the entire interest. See 37 CFR 3.71.

- ☐ Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

- ☒ attorney or agent of record.
Limited Recognition No. L0578

- ☐ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____



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February 18, 2011

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

- ☒ *Total of 1 form is submitted.

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q93036

Thierry CHOLLEY, et al.

Appln. No.: 10/567,564

Group Art Unit: 1771

Confirmation No.: 6629

Examiner: Randy Boyer

Filed: January 8, 2007

For: HYDROTREATING AND OR HYDROCRACKING CATALYST OF
HYDROCARBONS AND PREPARATION THEREOF

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MAIL STOP AF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Pursuant to the Pre-Appeal Brief Conference Pilot Program, and further to the Examiner's Final Office Action dated August 19, 2010 and Advisory Action dated December 8, 2010, Applicants file this Pre-Appeal Brief Request for Review. This Request is accompanied by the filing of a Notice of Appeal and Petition for Three-Month Extension of Time.

Claims 1-5, 11-13, and 17-22 are patentable because:

- (1) Vangermain does not disclose that nickel dimethylglyoxime can be mixed with a compound A and a compound B to result in a composition having three components;
- (2) Vangermain does not disclose the weight percentage of metals in the at least one refractory oxide, and the working examples of Vangermain concern only homogeneous reactions in which the catalyst is not supported; and
- (3) Mansfield does not teach or suggest the use of an organic compound comprising two oxime groups.

Applicants now turn to the rejections at issue in detail.

I. Claim Rejections

Claims 1-5, 11-13, 17-20, and 22 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly obvious over Vangermain (U.S. Patent No. 3,526,645) as evidenced by Maskill (Howard Maskill, Mechanisms of Organic Reactions, New York, Oxford University Press Inc., 1996, p.62);

Claims 1, 5, 11-13, 17-19, 21, and 22 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Bjornson (U.S. Patent No. 4,693,991) in view of Mansfield (U.S. Patent No. 5,648,305); and,

Claims 2-4 and 20 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Bjornson in view of Mansfield and Maskill.

II. Patentability of Claim 1

Claim 1 is directed to a hydrocarbon hydroconversion catalyst, comprising a medium with a base of at least one refractory oxide, alumina, silica and/or silica-alumina containing (1) 0.1 to 10% by weight of at least one metal of group VIII, (2) 1 to 20% by weight of at least one metal of group VIB on the Period Table of the Elements, and (3) at least one organic compound with at least two oxime groups of the formula: $>C=NOR_1$, where R_1 is chosen from among a hydrogen atom, alkyl, allyl, aryl, alkenyl or cycloaliphatic groups, and combinations thereof, and one or more of these groups can be substituted by at least one electron donor group.

- 1. Vangermain does not disclose that nickel dimethylglyoxime can be mixed with another compound A and another compound B, to form a composition having three components**

The Examiner argues that Vangermain discloses the use of molybdenyl acetylacetonate (compound A) (a group VI metal) with nickel dimethylglyoxime (compound B) (a group VIII metal) at column 4, lines 25-30 and 43.

Applicants respectfully disagree with the Examiner's characterization of Vangermain.

Vangermain does not disclose the use of at least one refractory oxide containing (1) at least one metal of group VIII, (2) at least one metal of group VIB and (3) at least one organic compound with at least two oxime groups, as presently claimed. In other words, the presently claimed catalyst has three components. In comparison, Vangermain discloses the combination of only two components - any one of compound A listed at the bottom of column 3 with any one of compound B listed at the top of column 4. The list at column 4, lines 30-53 that the Examiner relies on only exemplifies possible combinations of compound A and compound B, i.e., a combination of only two components. It does not disclose the use of a combination of three components. Therefore, Vangermain does not teach each and every element of Claim 1.

- 2. Vangermain does not disclose the weight percentage of metals in the at least one refractory oxide, and the working examples of Vangermain concern only homogeneous reactions in which the catalyst is not supported**

The Examiner notes that at column 5, lines 25-27, Vangermain discloses that “[t]he catalyst system can be used in amounts varying within very wide limits as long as a catalytic quantity is employed” and at column 5, lines 29-33, Vangermain further discloses that “[I]f likewise, the molar ratio of (A) the metallic compound of Subgroups IV to VI (to be considered the oxygen transmitter) and (B) the metallic compound of Subgroups VII to VIII, to be considered the redox catalyst, can be widely varied.” The Examiner also notes that at column

5, lines 2-3, Vangermain discloses that “[t]he catalyst can. . . be present in solution, suspension, or on support materials. . . .”

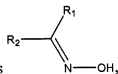
Irrespective of any of the above disclosures in Vangermain relied upon by the Examiner, since Vangermain does not teach the combination of three different compounds, as discussed above, Claim 1 is not anticipated or rendered obvious based on the above features identified by the Examiner.

3. Mansfield does not teach or suggest the use of an organic compound comprising two oxime groups


The Examiner notes that at column 4, lines 36-47, Mansfield discloses the use of oximes having the same chemical formula as found in present Claim 1.

Applicants again respectfully disagree with the Examiner’s characterization of Mansfield.

Claim 1 includes that limitation that the at least one organic compound contains at least two oxime groups of the formula $>C=NOR_1$. In other words, there are at least two $>C=NOR_1$ groups present in the organic compound of Claim 1.



In comparison, the formula in Mansfield relied upon by the Examiner is where R_1 and R_2 are selected from hydrogen, lower alkyl groups of 1-8 carbon atoms and aryl groups. Thus, the compound of Mansfield has only one oxime group. In fact, the exemplary

compound of Mansfield is a methyl ethyl ketoxime, having the formula , which also has only one oxime group. See, e.g., column 4, lines 48-49. Thus, while the oxime compound of Mansfield may have a similar structure as the oxime compound of Claim 1, the two

compounds are distinguishable because the presently claimed oxime compound has two oxime groups, but the Mansfield oxime compound has only one oxime group.

Based on the above, Applicants submit that Vangermain does not anticipate Claim 1. Moreover, the applied combination of Vangermain and Maskill fails to render obvious the hydrocarbon hydroconversion catalyst of Claim 1.

Additionally, Bjornson does not disclose a catalyst that comprises an oxime compound, and the Examiner relies on Mansfield to cure this deficiency in Bjornson. As discussed above, the oxide compound of Mansfield having one oxime group is patentably distinguishable from the presently claimed oxime compound having two oxime groups. Maskill does not cure this deficiency in the combination of Bjornson and Mansfield. Therefore, the applied combinations of Bjornson and Mansfield, and Borjinson, Mansfield and Maskill, also fail to render obvious the hydrocarbon hydroconversion catalyst of Claim 1.

Claims 2-5, 11-13, 17-22 are also allowable, at least by virtue of their dependence from present Claim 1.

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Respectfully submitted,



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